



# PIPELINE BACKFILL PLOW



ENGINEERING  
EXCELLENCE  
UNDERWATER

# PIPELINE BACKFILL PLOUGH

The backfill plough (BP) is designed for compatibility with the VMP trenching plough to cover rigid pipes or flexible umbilicals in the oil and gas industry. SMD has supplied pipeline ploughs for over 35 years to various customers and projects. The BP incorporates design features to allow it to operate on very soft soils without significant sinkage including large support skids and minimum weight.

## FEATURES

- 150 tonne maximum tow load
- 2.0m maximum trench depth capability
- Hydraulic power steering
- 1000m maximum water depth
- Rear driven compacting roller
- Remotely driven mouldboard depth control
- Optional front end loading
- Detachable lift point
- DVECS™ control platform
- Hydraulic powered steering
- Comprehensive instrumentation and surveillance

## SMD CUSTOMISATION SERVICE

SMD understand that every customer is different and therefore have individual needs from their systems. In order to meet your specific requirements SMD can customise our vehicles using our range of standard components to suit your preference and performance requirements.

## CONTACT US

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## SYSTEM SPECIFICATIONS

### GENERAL

Depth rating	1000msw
Dimensions:	
Length	24m
Width	24m
Height	8m
Weight in air (skids)	110 / 150te
Submerged weight	100 / 140te
Maximum tow load	150 / 200te

### PERFORMANCE

Soft ground capability	5kPa at full trench
Ground pressure	40kPa
Steering	±7 degrees

### MECHANICAL

Construction	High strength steel chassis
Wear parts	Replaceable wear resistant steel
Other	Stainless steel fittings and housings

### BACKFILL SYSTEM

Backfill blades	Symmetrical angled blades
Fronts skids	Follow trench
Rear skids	Provide support and lateral and roll stability

### HYDRAULIC SYSTEM

Installed power	150kW
Cylinders	Smart heavy duty marine type
Valves	Directional and counterbalance
Valve packs	Oil filled, pressure compensated
Manifolds, pipes and fittings	Stainless steel
Hoses	Multi-spiral flexible hoses
ROV intervention	Hot stab capability

### COMPACTION ROLLER

Trailing roller	to compact soil in centre of trench To improve backfill quality and prevent pipe floating
Roller dimensions	175m diameter x 3m width

### SUBSEA ELECTRONICS

Electronics pod	One atmosphere pressure vessel
Depth rating	1000m
Test pressure	125 x working pressure

### SUBSEA SURVEILLANCE

Cameras	3x cameras
Pan and tilt	1 x P&T units
OA sonar	Tritech / Kongsberg
Profiling sonar	Tritech/Kongsberg/Multibeam

### OTHER EQUIPMENT

Scissor Frame	200te SWL sea state 5
Control system	in 20ft ISO A60 container
Power system	Housed within 10ft ISO A60 container
Umbilical system	typically 4000m buoyant umbilical and 3te SWL winch
Winch HPU	typically 22kW deck mounted

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